

REMARKS

The Office Action of October 9, 2002 has been reviewed and the Examiner's comments carefully considered. The Examiner is thanked for indicating that the subject matter of claims 10 and 16-30 defines over the prior art of record and that claims 17-30 are in condition for allowance.

In Paragraphs 1 and 3 the Examiner suggests that the specification does not disclose and the drawings do not illustrate a three-tine grapple or a four-tine grapple with the at least one bucket as defined in claims 4 and 5. Claims 4 and 5 are directed towards demolition equipment, including a plurality of equipment bases, in which at least one of the bases is a bucket and at least one of the bases is a grapple base. Claim 4 specifically requires a grapple base to be a three-tine grapple, and claim 5 is directed towards the structure wherein at least one of the bases is a four-tine grapple. Regarding the description in the specification, note page 16 describing the three-tine grapple illustrated in Figs. 18-20. Regarding the description of the four-tine grapple, note the description on page 17 relating to Figs. 21-23. Regarding the description of the bucket note the description on page 6 and 13 of the specification.

The suggestion that these claimed features are not shown in the drawings is traversed. The bucket structure is illustrated in Figs. 1, and 3-13; the three-tine grapple of the present invention is illustrated in Figs. 18-20; and Figs. 21-23 illustrate the four-tine grapple of the present invention. The drawings, Figs. 1-37, clearly illustrate each and every feature of the present claimed invention. It is seldom possible in patent cases to illustrate every claimed feature in a single figure. As noted in 37 CFR 84 (h), the drawings "must contain as many views as necessary to show the invention" in which "modified forms of construction must be shown in separate views." Consequently, the rules for proper drawings require the distinct bases (e.g. the bucket, three-tine grapple and four tine-grapple bases) for the tines to be

illustrated in separate views. Reconsideration is respectfully requested.

With regard to this objection paragraph 3 of the Office Action rejecting claims 3 and 4 (or 4 and 5) under 35 U.S.C. §112, first paragraph, the Examiner's rejection is not understood. Claims 3 and 4 are set forth in the first sentence, but claims 4 and 5 are referred to in the explanation of the rejection. The Examiner suggests that the specification does not enable a person to make and use the invention since the disclosure does not disclose the three-tine grapple or four-tine grapple and the at least one bucket as set forth in claims 4 and 5. As discussed above, the drawings are believed to clearly illustrate all the various bases associated with the present invention, including the at least one bucket, the three tine-grapple base and the four tine-grapple base. One of ordinary skill in the art is clearly able to make and use the present invention, including using the tines with the at least one bucket base, the two-tine base, the three-tine base, and the four-tine base as clearly described in the specification and shown in the drawings. Reconsideration of the objection and the rejection of the claims under 35 U.S.C. §112, first paragraph, is respectfully requested.

✓ The Examiner has rejected to the Abstract of the Disclosure. Applicant has re-submitted a new Abstract of the Disclosure on a separate sheet in accordance with the Examiner's suggestions. This Abstract is the same Abstract that was included in the Abstract of the published PCT and no new matter is being added.

In Paragraph 4 of the Office Action, the Examiner has rejected claims 1-3, 6-8 and 11 as being anticipated by the teachings of U.S. Patent No. 4,799,852 to Ramun (the same inventor as the present application). The Examiner relies on the bucket 14 as one claw tine and utilizes the pair of parallel tines 21 as the opposing tines. The Examiner's rejection is respectfully traversed for the following reasons.

Claim 1 of the present application is directed towards a demolition equipment system, which has a plurality of equipment bases with each base forming at least a part of a

distinct demolition equipment unit, and a plurality of claw tines with each claw tine selectively, removably attached to an equipment base for forming part of each distinct demolition equipment unit. The Ramun '852 patent does utilize claw tines on a bucket attachment; however, the bucket attachment in the Ramun '852 patent is the only demolition equipment unit taught or suggested therein. There is no teaching or suggestion of a plurality of equipment bases with each equipment base forming at least a part of a distinct demolition equipment unit having selectable claw tines removably attached thereto as in the present claimed invention. The present claimed invention is intended to allow the operator to form distinct equipment units. The Examiner's stretched interpretation of the bucket as a claw tine together with the opposing tines formed by parallel tines 21 still does not meet the limitations in claim 1 of distinct demolition equipment units. Whether the Examiner wishes to categorize the Ramun '852 patent as disclosing a bucket piece of equipment or a grapple piece of equipment, it is still the same single demolition equipment unit. There is no teaching or suggestion of the multi-base/multi-unit system of the present claimed invention.

Claim 2 depends from claim 1 and further defines that the separate bases include a bucket base and a grapple base. As discussed above, the Ramun '852 patent does not disclose distinct bases and cannot, in any reasonable interpretation, be read on the bucket base and the separate grapple base as set forth in claim 2.

Claims 3 and 6-8 depend directly or indirectly from claim 1 and are patentable for the same reasons set forth above for claim 1.

Claim 11 of the present invention is directed towards the claw tine of the present invention and requires the physical angular rotation of the claw body between the open and closed position of at least 75 degrees. The claw tine shown in the Ramun '852 patent has a total angular rotation between the open and closed position less than 70 degrees. Consequently, this prior art cannot anticipate the subject matter of claim 11. Further, this

prior art does render the subject matter of claim 11 obvious. Due to the physical constraints of the tine disclosed in the Ramun '852 patent, this prior art tine cannot meet the claimed opening requirement.

Reconsideration of the rejections of claims 1-3, 6-8 and 11 as being anticipated as teachings of the Ramun '852 patent are respectfully requested for these reasons.

In Paragraph 5, the Examiner rejects the subject matter of claims 1-5 under 35 U.S.C. §102(e) as being anticipated by the Ramun '852 patent (it is understood that the Examiner meant to refer to "under 35 U.S.C. §102(b)"). The rejections of claims 1-3 in view of the Ramun '852 patent were discussed above. Additionally, claims 4 and 5 define the three-tine and four-tine grapple, which is clearly not illustrated in the Ramun '852 patent.

The Examiner apparently relies upon a second reference in this anticipation rejection, specifically the Kirkpatrick et al. patent. The Kirkpatrick et al. patent, U.S. Patent No. 6,155,619, is directed towards a grapple that does not cure the deficiencies of the Ramun '852 patent disclosed above. It is further improper to rely on secondary reference in an anticipatory type rejection. All of the claimed features must be found, explicitly or inherently, in a single prior art reference to sustain an anticipatory rejection. Regardless, the Kirkpatrick et al. patent teaches that four-tine and three-tine grapples are known in the art. The existence of two, three, four, and five-tine grapples in the prior art is not disputed. However, the Kirkpatrick et al. patent does not teach or suggest key features of the present invention, which is the construction of a demolition equipment system forming distinct equipment units incorporating the same tines. These features are set forth in claims 1-5 and are not taught or suggested in the Ramun '852 patent taken alone or in combination with the Kirkpatrick et al. patent. Reconsideration of this rejection is respectfully requested for these reasons.

The Examiner has rejected the subject matter of claims 9, 12-15 and 31-34 under 35 U.S.C. §103(a) in view of the teachings of the Ramun '852 patent. The Examiner suggests that it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the specific claimed ranges since discovering the optimum workable ranges involves only routine skill in the art. Applicant respectfully disagrees with the Examiner's position for the following reasons and will address the claims in turn.

First, turning to independent claim 11, the Ramun '852 patent does not teach the angular rotation set forth in claim 11. Furthermore, the claimed opening angular rotation is not an optimization of the existing structure. The structure disclosed in the prior art Ramun '852 patent cannot open up beyond the 70 degree rotation, such that the structure defining the opening range of at least 75 degrees is more than a mere optimization of the prior art claim. There is no teaching or suggestion in the Ramun '852 patent or in the Examiner's stated rejection of what one of ordinary skill in the art would modify to allow for the increased opening set forth in claim 11. It is only the Applicant's claimed invention that teaches or suggests this structure.

Claim 12 further defines the ratio of the hydraulic cylinder to the connection point. There is no teaching or suggestion of why one of ordinary skill in the art would modify the existing structure of the Ramun '852 patent to fall within this claimed limitation. This is not a mere optimization of the operating parameters of the prior art structure. It is a distinctly different structure from that found in the prior art, and the Examiner's suggested modifications are not supported anywhere in the prior art. The fact that it may be physically possible to modify the prior art structure to fall within the present claimed invention does not support the Examiner's suggestion that such a modification is obvious. Claims 9 and 12 are believed to further distinguish from the Ramun '852 patent for these reasons. Claims 13 and 14 further define the opening rotation of the present invention, which further distinguish the

tine of the present claimed invention from the prior art tine.

Claim 15 further defines that the maximum holding force of the claw tine is located at a position between 25 and 40 degrees from the closed position. The Examiner does not suggest why one of ordinary skill in the art would modify the structure of the Ramun '852 patent in an attempt to meet this claimed structure. Some of the Applicant's disclosure, which identifies the advantage this structure, represents more than a mere optimization of the prior art operating parameters.

Independent claim 31 specifically defines that the maximum holding force of the claw tine is positioned about a third ($1/3$) of the total rotation of the claw tine body from the closed position and is believed to further distinguish the present invention from the teachings of the Ramun '852 patent for the same reasons discussed above in connection with claim 15. Claims 32 and 33 each depend from claim 31 and further define the total angular rotation of the claw body, which is not found in the Ramun '852 patent, similar to that discussed above in connection with claims 9 and 12. Claim 34 depends from claim 31 and is allowable for the reasons discussed above in connection with claim 31.

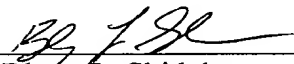
The Examiner's obviousness rejections of these claims in view of the teachings of the Ramun '852 patent are not fairly supported by a reasonable interpretation of the Applicant's own prior art patent. The prior art set forth in the Ramun '852 patent does not teach, or consider any geometric design characteristics. The present invention defines design criteria, which addresses shortcomings in the physical structures of the prior art devices. The Examiner has merely dismissed the specific claim limitations, suggesting that these are mere matters of optimization. However, the claimed parameters define unique structural characteristics of the tine of the present claimed invention and are not taught, suggested or even addressed or possible with the existing prior art structure. It is not clear how a prior art tine that fails to open up beyond 70 degrees can be optimized to operate in a

range of at least 75 degrees of opening rotation, between 75 and 100 degrees of opening rotation and/or 85 degrees as set forth in several of the selected claims. The "optimization" suggested by the Examiner is a complete re-design of the tine found in the prior art without any teaching or suggestion to do so other than the Applicant's own disclosure. As discussed in the specification, there are other operating parameters associated with modifying each of these features.

Reconsideration of the Examiner's rejections is respectfully requested for all of these reasons. Claims 1-34 remain in the application and favorable action is respectfully requested.

Respectfully submitted,

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